

May 17, 2011 Water Supply Forecast Discussion

This forecast includes observed conditions through the morning of May 17, 2011.

This forecast is posted at:

<http://cdec.water.ca.gov/cgi-progs/iodir?s=b120up>.

Forecast Summary:

The projected median April-July runoff now ranges from 137 percent (Sacramento River at Bend Bridge) to 186 percent (Kern River). The forecasts for all rivers except the Tule River went up since last week (up nearly 5 percent overall) from the May 10 Bulletin 120 Forecast Update due to above normal precipitation that fell over much of the Sierra.

Runoff:

For all rivers included in this forecast update, the current May unimpaired runoff rates are equal to or above 129 percent of their monthly average. On the lower end of the spectrum, the Sacramento River at Bend Bridge, Tuolumne, San Joaquin, and Kings rivers are all flowing at about 130 percent of their monthly average. At the high end, the Feather and Kern rivers are flowing at 177 and 175 percent, respectively, of their monthly average.

Precipitation:

As of Monday, May 16th, the Northern Sierra 8-Station Index reflects a May total of 1.2 inches (57 percent of the May average) after gaining nearly 1 inch of precipitation over the past week. The seasonal total is now 65.6 inches, which is 141 percent of average-to-date and 131 percent of an average water year. The San Joaquin 5-Station Index shows a monthly total of 1.3 inches (72 percent of the May average) after gaining just over an inch of precipitation over the past week. The seasonal total is now 59.0 inches, which is 155 percent of average-to-date and 145 percent of an average water year.

Snowpack:

According to snow sensor data from the morning of May 17th, statewide snowpack is 33 inches (114 percent of the April 1 average and 213 percent of average-to-date). Despite an overall loss in snow water content during the past week of 3 inches statewide, the percent of average-to-date increased. This means that the snow melt continues to occur at a slower than normal pace for this time of the year. Regionally, the Northern Sierra, Central Sierra, and Southern Sierra snowpack are 120, 114, and 106 percent of their respective regional April 1 average.

In our links section below, we have now included links for the 20-day and peak day snow melt forecasts as issued by the California-Nevada River Forecast Center. These forecasts are automatically updated daily and are available starting at noon each day. These links are listed under “**California Nevada River Forecast Center Snow Melt Guidance Products**” below.

Weather and Climate Outlooks:

The weather forecast for the next six days is dry with temperatures trending back towards normal for this time of year. During the next six days, the freezing levels in the Northern Sierra will range from 8,000-12,000 feet and from 10,000-14,000 feet in the Central and Southern Sierra with the coolest days being Sunday and Monday before increasing back towards normal levels by next Tuesday. For the northern part of the State, there is a slight chance for trace amounts of precipitation for Sunday.

For the six to ten day outlook, temperatures across the State are forecast to mimic near normal conditions. During this same period the above normal precipitation is forecast for all areas north of Yosemite National Park and below normal precipitation for the southern third of the State including the Southern Sierra Nevada. For all other areas including most of the Central Sierra Nevada, near normal amounts of precipitation are expected.

The Climate Prediction Center's (CPC) one-month outlook for June, updated on May 19, suggests increased chances of below normal temperatures for areas near the Oregon border and increased chances of above normal temperatures for the Mojave Desert region. All other areas are forecast to have equal chances of above or below normal temperatures. The same outlook suggests equal chances of above or below normal precipitation for the entire State.

The CPC's three-month outlook (June-August, updated May 19) suggests increased chances of above normal temperatures for the bulk of the Central Valley, the Sierra Nevada, the South Coast, and the Colorado River region. For all other regions including the Shasta-Trinity region, equal chances of above or below normal temperatures are forecast. The same outlook suggests increased chances of below normal precipitation for the northwest region of the State which would include parts of the Klamath, Scott, and Trinity River watersheds. For all other areas of the State, this outlook calls for equal chances of above or below normal precipitation.

Next Update:

The next Bulletin 120 Forecast update will be produced for conditions on May 24, 2011, and will be available by Thursday, May 26, 2011. If you need guidance before then, or have any questions, please contact us:

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Important Links

Full Natural Flow Data:

Daily FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FNF>

Monthly FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FNFSUM>

Seasonal FNF

<http://cdec.water.ca.gov/cgi-progs/reports/FLOWOUT>

Precipitation Data:

Northern Sierra 8-Station Precipitation Tabulation Table

http://cdec.water.ca.gov/cgi-progs/products/8-Stations_Tab.pdf

San Joaquin 5-Station Precipitation Tabulation Table

http://cdec.water.ca.gov/cgi-progs/products/5-Stations_Tab.pdf

2010 WY Precipitation Summary

<http://cdec.water.ca.gov/cgi-progs/precip/PRECIPSUM>

Snow Data:

Latest Snow Sensor Report

<http://cdec.water.ca.gov/cgi-progs/snow/PAGE6>

Latest Statewide Summary of Snow Water Equivalents

<http://cdec.water.ca.gov/cgi-progs/snow/DLYSWEQ>

Monthly Snow Course Report

<http://cdec.water.ca.gov/cgi-progs/snow/COURSES>

California Nevada River Forecast Center Snow Melt Guidance Products:

Snow Data and Spring Seasonal Runoff Forecasts

<http://www.cnrfc.noaa.gov/snowmelt.php>

20-Day Snowmelt Guidance (Raw Model Output)

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSESP.php>

Peak 1-Day Stream flow Volume and Date Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHFSSPK.php>

Extended Regional Forecasts:

California Nevada River Forecast Center 6 Day QPF and Snow Level Forecast

<http://www.cnrfc.noaa.gov/awipsProducts/RNOHD6RSA.php>

Climate Prediction Center 6-10 Day Outlook Forecasts

<http://www.cpc.ncep.noaa.gov/products/predictions/610day/>

Climate Prediction Center One-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/30day/>

Climate Prediction Center Three-Month Outlook Forecasts

<http://www.cpc.noaa.gov/products/predictions/90day/>

Drought Information:

U.S. Seasonal Drought Outlook

http://www.cpc.ncep.noaa.gov/products/expert_assessment/seasonal_drought.html

El Nino/La Nina:

http://www.cpc.ncep.noaa.gov/products/analysis_monitoring/enso_advisory/